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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/769,076	01/25/2001	Michael D. Krysiak	P/35-4	7143

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12/17/2007

EXAMINER	
VALENTI, ANDREA M	

ART UNIT	PAPER NUMBER
3643	

MAIL DATE	DELIVERY MODE
12/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	09/769,076	KRYSIAK ET AL.
	Examiner	Art Unit
	Andrea M. Valenti	3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12 October 2007.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-30,32,36-42 and 45-53 is/are pending in the application.
- 4a) Of the above claim(s) 1-25,36,37,39-42,45,46,48,49,51 and 53 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 26-30, 32, 38, 47, 50, 52 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 26, 27, and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,324,781 to Stevens.

Regarding Claim 26, 27, 38, Stevens teaches a colored mulch product (Stevens abstract line 2) consisting essentially of: a material comprising a fiber cellulose, clay, loam, sand, and/or a combination of same; a binding agent (Stevens Col. 2 line 2); and a dye and/or pigment (Stevens Col. 6 line 35). Stevens teaches a dye and that the dye indicates to a user environmental conditions of the soil where the mulch is placed. The mulch of Stevens includes both a dye and a fertilizer. Therefore, when the user sees the mulch color the user will know that mulch has been applied to that portion of soil along with a fertilizer i.e. that soil portion has been fertilized which is an environmental condition.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26, 27, 28, 29, 30, 38, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,324,781 to Stevens in view of U.S. Patent No. 6,019,062 to Lombard et al.

Regarding Claim 26, 28, 29, 30 and 50, Stevens teaches a colored mulch product (Stevens abstract line 2) consisting essentially of: a material comprising a fiber cellulose, clay, loam, sand, and/or a combination of same; a binding agent (Stevens Col. 2 line 2); and a dye and/or pigment (Stevens Col. 6 line 35). Stevens teaches a dye, but is silent on the dye **indicates** to a user environmental conditions of the soil where said mulch is placed; the dye **indicates** to a user the acidity of said soil; the dye **indicates** to a user the moisture content of said soil; or the dye **indicates** to a user the chemical content of said soil and it is an environmentally safe dye (Lombard abstract second to last line).

However, Lombard et al teaches a dye indicator i.e. a pH indicating dye for application to cellulosic material such as paper (Lombard Col. 2 line 1-5 and Col. 2 line 11-15; Col. 2 line 60-67). It would have been obvious to one of ordinary skill in the art to modify the teachings of Stevens with the teachings of Lombard at the time of the invention since the modification is merely an engineering design choice involving the selection of a known alternate dye selected for the known advantage of monitoring pH levels as taught by Lombard and is an environmentally safe dye as taught by Lombard (Lombard abstract).

Regarding Claim 27, Stevens as modified teaches the mulch comprising; nitrogen, phosphorous, and potassium fortifiers (Stevens abstract last line).

Regarding Claim 38, Stevens as modified teaches the mulch is the same or similar color of an actual plant, flower, fruit, or vegetable of a seed planted with the mulch (Stevens Col. 6 line 37).

Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,324,781 to Stevens in view of U.S. Patent No. 6,019,062 to Lombard et al as applied to claim 26 above, and further in view Japanese Patent JP 01262735 A to Yanmar Agricult Equip Co LTD.

Regarding Claim 52, Stevens as modified teaches a method of placing colored mulch on top of soil; changing the colors of the mulch based on the condition of the soil. Stevens is silent on adding chemicals to the soil based on the color of the mulch. However, it is old and notoriously well-known in the art of plant husbandry to observe and test soil conditions to see if they meet the desired parameters and to adjust the parameters when necessary. Yanmar teaches the general knowledge of one of ordinary skill in the art to add fertilizer when the pH is out of desired range (Yanmar abstract and Fig. 1 #2). General knowledge that the pH of a growing medium component determines the addition of fertilizer. It would have been obvious to one of ordinary skill in the art further modify the teachings of Stevens with the teachings of Yanmar at the time of the invention for the advantage of promoting healthy plant development. Examiner takes official notice that it is old and notoriously well-known to add fertilizer based on a pH of

the soil e.g. tomato plants prefer a certain acidity in the soil for healthy development so it is general practice to test the pH to determine if and how much fertilizer is needed.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,324,781 to Stevens in view of U.S. Patent No. 6,019,062 to Lombard et al as applied to claim 26 above, and further in view of U.S. Patent No. 5,734,167 to Skelty.

Regarding Claim 32, Stevens as modified teaches coloring the mulch, but is silent on the dye is fluorescent. However, Skelty teaches it is old and notoriously well-known to dye agricultural products with fluorescent dye allowing the mulch to glow in the dark (Skelty Col. 1 line 35-45). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Stevens with the teachings of Skelty at the time of the invention since the modification is merely the selection of a known alternate coloring for the advantage of enabling safe night time agricultural operations as taught by Skelty (Skelty Col. 1 line 1-26).

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,324,781 to Stevens in view of U.S. Patent No. 5,734,167 to Skelty.

Regarding Claim 32, Stevens teaches coloring the mulch, but is silent on the dye is fluorescent. However, Skelty teaches it is old and notoriously well-known to dye agricultural products with fluorescent dye allowing the mulch to glow in the dark (Skelty Col. 1 line 35-45). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Stevens with the teachings of Skelty at the time of the

invention since the modification is merely the selection of a known alternate coloring for the advantage of enabling safe night time agricultural operations as taught by Skelty (Skelty Col. 1 line 1-26).

Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,067,140 to Thomas in view of U.S. Patent No. 6,019,062 to Lombard et al.

Regarding Claim 47, Thomas teaches a colored mulch product (Thomas abstract) comprising: a material comprising a fiber cellulose (Thomas abstract first line), clay, loam, sand, and/or a combination of same; a binding agent (Thomas Col.1 line 30 "wetting agent" and Col. 4 line 35-41); and a dye and/or pigment (Thomas Col. 1 line 35) produced by a lifting and tumbling agglomeration operation (Thomas Col. 2 line 65-66. Thomas teaches adding fertilizer to the mulch mixture (Thomas Col. 1 line15). Thomas is silent on the dye indicates to a user the environmental conditions of the soil where the mulch is place. However, Lombard et al teaches a dye indicator i.e. a pH indicating dye for application to cellulosic material such as paper (Lombard Col. 2 line 1-5 and Col. 2 line 11-15; Col. 2 line 60-67). It would have been obvious to one of ordinary skill in the art to modify the teachings of Stevens with the teachings of Lombard at the time of the invention since the modification is merely an engineering design choice involving the selection of a known alternate dye selected for the known advantage of monitoring pH levels as taught by Lombard.

Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,324,781 to Stevens in view of U.S. Patent No. 5,697,984 to Swatzina et al.

Regarding Claim 50, Stevens teaches a colored mulch product wherein the color, but is silent on the mulch product fades or disappears in response to a lack of fertilizer in the mulch. Stevens teaches the mulch product is made up of fertilizer (Stevens abstract last sentence), mulch plus fertilizer makes a mulch product. Swatzina teaches it is old and notoriously well-known to color fertilizer (e.g. red fertilizer Swatzina; Col. 2 line 31-33 and Example 4). One of ordinary skill in the art would be motivated to modify the teachings of Stevens with the teachings of Swatzina at the time of the invention for a desired aesthetic design. Stevens as modified by Swatzina, i.e. the selection of red fertilizer, would inherently teach that as the red disappears or fades from the mulch the fertilizer is disappearing too.

Response to Arguments

Applicant's arguments filed 12 October 2007 have been fully considered but they are not persuasive.

Applicant argues that the Stevens reference points to no example and no teaching that the colored mulch shows when a soil has been fertilized and that the color taught by Stevens is only for appearance. In response to applicant's argument that Stevens colors the mulch for appearance, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious.

See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Applicant's claim language is very broadly presented. Applicant has merely claimed in claim 26 that the "dye indicates to a user environmental conditions of the soil where said mulch is placed." Examiner maintains that the dye applied to the mulch of Stevens (Stevens Col.6 line 35-37) does inherently indicate to a user an environmental condition of the soil. Applicant has not indicated/claimed any explicit environmental condition. Stevens teaches that the mulch mat has fertilizer in it (Stevens Col.4 line 50). Therefore when the user sees the color of the mulch mat, the color can indicate that fertilizer has been applied to a certain area i.e. the environmental condition of that soil area is a fertilized condition.

Applicant argues that Lombard relates to animal litter and does not understand alone or in combination the problem of the present application to indicate to a user condition of the soil.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, there is some teaching and motivation found both in the references and in the knowledge generally available to one of ordinary skill in the art. Stevens teaches a mulch of shredded paper. It is well known in both the art of plant husbandry and animal husbandry that shredded

paper can be applied as mulch ground cover and as an animal feces collection cover i.e. litter. Therefore, both Stevens and Lombard teach a cellulosic substrated i.e. paper that receives a dye. Lombard is cited to teach that it is known to apply a pH-indicating dye solution to provide a visually detectable color transition at a particular pH level to a paper substrate (Lombard abstract). Stevens teaches it is known to dye paper (Stevens Col. 7 line 35). Examiner maintains that the modification is merely an engineering design choice involving the selection of a known alternate dye/additive applied to a paper substrate selected for the known advantage taught by Lombard of visually indicating pH levels. The modification is merely the simple substitution and/or combination of known prior art elements to obtain predictable results.

In response to applicant's argument that Lombard is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Lombard is reasonably pertinent to the particular problem with which applicant was concerned i.e. a means of providing a visual indicate of an environmental condition such as pH areas.

Applicant argues the combination of Stevens and Lombard does not teach changing colors of the mulch based on the condition of the soil. The mulch taught by Stevens as modified by the dye of Lombard teaches a cellulosic based paper, when the paper absorbs rain water or wicks up liquid from the soil the color of the mulch will

change based on the dye indicator taught by Lombard. Applicant's language again is very broad and applicant has not explicitly claimed what "condition of the soil" is the soil dry, is the soil wet, does the soil need fertilizer? Conditions of the soil could merely be wet or dry and the chemicals added to the soil could merely be water added because the mulch color is indicating that the mulch and thus the soil is dry.

Yamada was cited to support the general knowledge in the art that additional fertilizer is added to a growth medium when the pH of a nutrient solution exceeds a preset range. In this case, rain water could be viewed as the nutrient solution and when it hits the mulch taught by Stevens that contains the dye of Lombard and is absorbed into the soil, the color of the mulch will indicate if the rain water pH exceeds a preset range which means the soil condition pH is effected and if it requires fertilizer to adjust the pH which in turn effects the soil condition.

Regarding claim 50 applicant argues that to have the colored mulch product fade or disappear is against teaching the teachings of Stevens. Stevens teaches it is known to use fertilizer in combination with mulch and Swatzina teaches it is known to dye fertilizer to make a red fertilizer (Swatzina Col. 2 line 31-33 and Example 4). Examiner maintains it would have been obvious to one of ordinary skill in the art to modify the teachings of Stevens with the red color fertilizer of Swatzina at the time of the invention as a means to identify a particular type/concentration of fertilizer and as a visual indicator that fertilizer has been applied. Over time and the fertilizer goes away the red color will inherently change, fade, disappear. Furthermore, the color of the paper portion taught by Stevens will inherently fade over time with exposure to sunlight. Since

the mulch of Stevens contains fertilizer as the color of Stevens inherently fades with age it is also a visual indicator that the amount and strength of fertilizer has been depleted with age too.

Examiner maintains that applicant has not patentably distinguished over the teachings of the cited prior art of record.

Conclusion

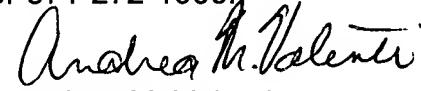
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea M. Valenti whose telephone number is 571-272-6895. The examiner can normally be reached on 7:00am-5:30pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 571-272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Andrea M. Valenti
Primary Examiner
Art Unit 3643

14 December 2007